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ABSTRACT

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Influences of Personal and Academic Characteristics On Beginning Teacher Education Students' Attitudes, Concerns, and Anxieties Toward Teaching

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Abstract

The relationships between measures of anxiety, concerns, and attitude toward teaching and selected personal and academic characteristics of 260 beginning education students were investigated. Relationships were found between these measures and basic academic skills, earliness of decision to enter teaching as a career, relative assurance of decision to become teachers, estimated future success as a teacher, level of father's education, gender of the student, selected teaching field, and attained college class rank. Among the more specific findings were: males were more concerned about actual teaching tasks; more capable students were less positive about teaching and tended to delay their decision to become a teacher; students whose fathers had less education were more anxious about teaching; higher achieving students were more concerned about becoming teachers; students more confident about teaching had more positive attitudes and lower anxiety scores.

Influences of Personal and Academic Characteristics On Beginning Teacher Education Students' Attitudes, Concerns, and Anxieties Toward Teaching

In recent years efforts have been made to further the study of teaching through the use of more theoretical frameworks (Veenman, 1984). One such approach views teaching from a developmental perspective wherein growth is seen as passing through a series of phases or stages. Fuller (1969) described teacher development as passing through three stages of concerns about teaching: self, task, and impact. The first stage is characterized by concerns of self adequacy, being observed, and being liked by pupils. In the second stage concerns are more situation or task oriented, illustrated by concerns such as too many students and insufficient materials. Concern of teacher impact upon students is predominant in the third stage with concerns such as the ability to provide individual curriculum and meeting students' social and emotional needs. The Teacher Concerns Questionnaire was developed by Fuller to assess teaching concerns within this theoretical model of teacher development and provides a total score and subscale scores related to concerns of self, task, and impact upon students. The form used in the present study consisted of 15 items, five in each subscale (George, 1978). Each item is answered on a continuum from 1 (Not Concerned) to 5 (Extremely Concerned).

Two additional instruments, which were designed to assess anxieties and attitudes of teachers within a general developmental perspective, were also used in the present study. Parsons (1973) developed the 29 item Teaching Anxiety Scale with the implicit assumption that teaching anxiety will decrease as knowledge and skills develop during teacher training. Each item is answered on a continuum from 1 (Never) to 5 (Always) with the lowest possible "score" of 29 representing lack of any anxiety and the highest possible "score" of 145 representing extreme anxiety toward teaching. Fuller (1969) and Coates and Thoresen (1976) generally view teaching concerns as the source for feelings of anxiety.

Merwin and DiVesta (1969) developed an 11 item scale that measures attitudes toward teaching as a career. Each item is answered on a 1 (Strongly Disagree) to a 6 (Strongly Agree) continuum. A score of 11 represents the most negative attitude and a score of 66 the most positive. A high score on this scale suggests that one sees teaching as a career that satisfies important needs. This scale was designed from a developmental perspective with the assumption that teachers in training would report an increasingly positive attitude towards teaching as their skills and knowledge increased.

Coates and Thoresen (1976) concluded after a review of

the research literature that both preservice and inservice teachers report considerable anxiety, stress, and concern about teaching. They further assumed that too intense anxiety levels might be detrimental to both students and teachers although the limited research to date has not clarified the exact nature of this relationship. Lortie (1975) described the central concern of preservice teachers as being doubtful about being able to actually conduct instruction.

The research literature pertaining to prospective teacher attitudes indicates a positive attitude toward children, less concern than other college students about future income, and a desire to help others (e.g., Richards, 1960). Research also indicates that differences in attitude exist when prospective teachers are compared by gender, anticipated grade level of instruction, and selected major in education (Villeme & Hall, 1980).

Purpose

The general purpose of this study was to examine the concerns, anxieties and attitudes of beginning education students within the general theoretical models described in the preceding paragraphs. This was done in relation to selected personal and academic characteristics whose possible mediation effects on beginning teachers' concerns, anxieties and attitudes heretofore have not been emphasized in the literature.

Hypotheses

Findings gained from a review of literature related to beginning teacher education students and suppositions based on the teacher development theories cited earlier prompted the formulation and later testing of the following sets of directional hypotheses:

1. With respect to academic characteristics it was predicted that the higher academic achievers, as shown by scores from the Comprehensive Test of Basic Skills (CTBS), when compared to the lower achievers, (a) will reveal lower levels of teaching concern, less anxiety and a less positive attitude toward teaching, and (b) will have decided to become teachers at a later date.

2. With respect to the personal characteristics, it was predicted that: (a) Students more assured of their decision to become teachers and those who perceive themselves to be more effective future teachers will report more positive attitudes toward teaching and lower levels of concern and anxiety. (b) Students whose fathers have more education will report a less positive attitude toward teaching and lower levels of concern and anxiety. (c) Students classified as upper classmen, females, and elementary or special education majors will report more positive attitudes, higher levels of concern, and more anxiety than will lower classmen, males, and secondary or specialized majors respectively.

Methods

During the spring semester of 1985 all Bowling Green State University students registered in a required orientation to education course were administered: (a) the Comprehensive Test of Basic Skills (CTBS), (b) the Teacher Concerns Questionnaire, (c) the Attitude Toward Teaching As A Career Scale, (d) the Teaching Anxiety Scale, and (e) a questionnaire requesting various types of demographic information such as selected major in education, their assurance of their decision to teach, when they first decided to become a teacher, how effective they felt they would be as a future teacher, and the educational levels of their fathers.

Subjects

Approximately 260 students completed these instruments of whom 80% were females and 20% were males. Thirty-six percent were freshmen, 45% sophomores, 14% juniors and 5% seniors. This sample of entering education students can be described as (a) relatively higher in language skills and relatively lower in math skills as measured by the CTBS, (b) primarily interested in elementary education (36%), secondary education (27%), and special education (19%), (c) from small to medium size high schools (88% from senior classes less than 500 and 60% from classes less than 300), (d) very certain or almost certain of their decision to

teach (84%), (e) from families of teachers (59% denoted one or more teachers among a parent, grandparent, aunt, uncle, brother, or sister), (f) almost two-thirds of mothers or fathers not having a four-year college degree, (g) from somewhat larger families (70% had two or more siblings), (h) about three times as likely to have their mother teaching rather than their father (20% versus 7%), (i) very confident about their future ability to teach effectively (75% with perceived ratings of "unusually good" "to truly outstanding"), and (j) most decided prior to high school graduation that they wanted to become teachers (70%).

Procedures

The relationships between the three measures and major in education (elementary, secondary, special education, and specialized areas), assurance of the decision to teach (very certain, almost certain, 50/50, and very doubtful, the time of decision to teach (elementary, high school, and after high school), perceived effectiveness as a future teacher (truly exceptional, outstanding, unusually good, and good), the educational level of fathers (less than high school, high school, some college, four-year degree and more than four year degree), and basic academic skills (approximate high, middle and low one-third on CTBS total battery scores) were examined through the use of analysis of variance. Independent t tests were used for the gender

comparison, and Pearson correlations were used to assess the possible relationships between total concerns, anxiety, attitude and CTBS scores. In addition, item analyses of student responses to the concerns, attitude, and anxiety scales were completed to provide descriptive information relative to these measures.

Results

Item Analyses

Item response patterns to the anxiety about teaching scale indicated that students were most anxious, in order, about the following classroom situations: finding teaching a satisfying profession, students following instructions, preparation of lessons, ability to control a class, and ability to recall knowledge in front of a class. The situations least anxiety provoking for this sample were: being less happy about teaching than they thought, differences in background between self and students, answering student questions, and lack of rapport with students.

Student responses to the individual items on the teaching concerns checklist indicated that their three major concerns were: lack of instructional materials, meeting the needs of different kinds of students, and whether each student gets what he/she needs. Teaching situations of least reported concern were: too many

noninstructional duties, working with too many students, and the routine and inflexibility of the teaching situation. It is interesting to note that these latter situations of lowest concern appear to be in direct contrast to Corwin's (1975) findings that noninstructional duties, class size, and inflexibity of school policy and working conditions are among the most frequently negotiated nonmonetary concerns of practicing teachers.

Items eliciting strongest agreement on the attitude toward teaching as a career scale were, in order: a lot of advantages to teaching, certainty of enjoying teaching, and more advantages than disadvantages to teaching as a career. The three items on this scale receiving the strongest disagreement (but still denoting positive attitudes) were: teaching may be all right for some but not me, would not care for the work of a teacher, and teaching is not worth the sacrifice of going to college, long hours, and poor pay.

Testing of the Hypotheses

In regard to the first hypothesis, it was found that the correlation between the total concerns and total CTBS scores was -.22, which was significant at $p < .05$. The CTBS scores did not correlate significantly higher than zero with either the anxiety scores or with the attitude scores. These findings in essence indicate that the

predictions (in Hypothesis 1a) for the higher achievers to have lower anxiety and attitude scores were not sustained, but the hypothesized negative relationship between concerns and achievement, although of low magnitude, was supported by the data. This relationship was further investigated by dividing the number of concerns total scores into approximate thirds (high, middle, low) and then examining the average CTBS score that each of these groups earned; this data is presented in the top section of Table 1. It was found that those students who were in the lowest level of concern about teaching were the highest achievers, with a mean raw score of 180.93 (out of 280 CTBS items). The F-ratio of 4.32 with 2 and 177 degrees of freedom was significant at the .015 level. Scheffe post-hoc pair-wise mean comparisons, which used the .05 level of significance, indicated that the CTBS means for the low and mid concern groups were significantly higher than the mean for the high concern group. No other significant pair-wise mean comparisons were found.

Insert Table 1 About Here

Data presented in the second section of Table 1 relate to Hypothesis 1b, namely, that those students who decided to become teachers after they left high school would be

higher academic achievers than those who decided to become teachers while in the elementary grades or high school. The data indicate that the prediction was partially sustained, i.e., the "after high school group" had a significantly higher mean than the "in high school group," but no mean difference was found between the "after high school group" and the group who decided in the elementary grades to become teachers.

Although not specifically related to a stated problem of this paper, students' attitude scores toward teaching as a career were analyzed by when they decided to become teachers. It was found that the mean attitude of the "after high school group" (48.54) was significantly lower than either the means for "in elementary grades" (52.42) or "in high school" (51.15) (ANOVA F (2,260) = 6.36, p = .002). This data suggests that those who decided later to become teachers have a tendency to be more academically capable but have a less positive attitude toward teaching as a career than do those who decide to become teachers in high school or in the elementary grades.

Table 2 presents basic data related to determining whether students' assurance of becoming teachers and their perceived future teaching effectiveness levels were related to their concerns, attitudes, and anxiety scores (Hypothesis 2a). The prediction that those students

feeling more assured of their decision to teach and rating themselves more effective as future teachers would have more positive attitudes and lower anxiety levels was sustained. Mean comparisons for both of these measures revealed differences significant at the .0001 level. The relationship between perceived effectiveness as a future teacher and concerns was more tenuous as only one of the four concerns score comparisons (Task) produced significance ($F = 3.16$, $p = .03$). The Scheffe post-hoc procedures at the .05 level did not detect any pair-wise mean differences among the four means. There seems, however, to be a slight trend for those students who predicted themselves to be better teachers to be more concerned with the tasks of teaching (exemplified by these five items: lack of instructional materials, too much pressure, too many noninstructional duties, too many students, and the routine and inflexibility of teaching) than those who predicted themselves to be less outstanding teachers.

Insert Table 2 About Here

The educational levels of fathers (Hypothesis 2b) was significantly related to the anxiety levels of the students ($F = 3.17$, $p = .01$) as presented in Table 3. Students

whose fathers had less formal education were generally more anxious about teaching than were the students whose fathers had higher levels of education. Neither the attitudes nor the concerns measures were related to fathers' educational attainment.

Insert Table 3 About Here

Relative to gender differences (Hypothesis 2c), data in Table 3 reveal that males were more concerned about the tasks of teaching (the routine and inflexibility, too much pressure, etc.) than were the females ($t = 3.13$, $p < .01$). The females reported a significantly more positive attitude toward teaching as a career than did the males ($t = 3.73$, $p < .01$). Further tests related to this same hypothesis revealed that the freshmen, sophomores, and elementary majors had more positive attitudes toward teaching as a career than did seniors and secondary or specialized area majors. It should be noted that many of the 48 juniors and seniors were transfer students and four of the 12 seniors were already degree holders and were working for teacher certification. Because of the confounding of transfers and degree holders with junior and senior class ranks, one cannot determine whether these attitude differences were attributable to class rank or to population differences.

However, a possible explanation is that many of these juniors and seniors might have been truly late in deciding to teach and lateness of decision appears to be related to less positive attitudes toward teaching.

Discussion

In summation, it was found that personal and academic characteristics of beginning teacher education students are related to measures of concerns, attitudes, and anxieties about teaching. These findings lend partial support for the stated hypotheses and the theories underlying the selected measures. Relationships, although far from consistent across all measures, were found between the measures and students' achievement scores, earliness of their decision to enter teaching as a career, relative assurance of their decision to teach, estimated future success as a teacher, level of father's education, gender of the student, selected teaching field and college class rank.

Additionally, it appears that two sets of generalizations are supported by the data. First, it appears that prospective teachers have positive attitudes about children and teaching, that attitudes differ among prospective teachers by gender and major, and that beginning education students report a number of anxieties and concerns about becoming teachers. Teaching matters of

most concern to the prospective teacher are related to satisfaction with the teaching career, performance with and control of classes, meeting the individual needs of students, and lack of instructional materials; matters of least concern were differences in background between students and themselves, rapport with students, inflexibility of teaching, too many noninstructional duties, and classes too large.

Secondly, the findings provide some suggestions or generalizations that need to be examined by further research and if validated certainly have implications for teacher education programs: (a) Male prospective teachers may be more concerned about actual teaching tasks than female students due to fewer experiences with children. (b) More academically capable students may be planning to use education as a stepping stone to another profession or may see more of the subtle difficulties of success in teaching, and thus delay their decision to become teachers. (c) The stereotype description of the prospective teacher as being white, female, child-oriented, from larger families in more rural areas, and being a first generation college graduate seeking upward mobility is probably still true to a large extent. (d) At the time of enrollment in their first education course, most prospective teachers are

very confident of their decision to teach and of becoming very successful teachers. (e) Students whose fathers have less education are more anxious about becoming teachers.

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Table 1

One-Way ANOVA of CTBS Total Battery Scores

(Hypotheses 1a and 1b)

Concerns Total Score Classification

Group*	N	Means	S.D.	F-Ratio	Scheffes**
1. Low	61	180.93	28.02		$\bar{X}_1 > \bar{X}_3$
2. Mid	70	177.37	27.94	4.32	$\bar{X}_2 > \bar{X}_3$
3. High	49	163.82	39.93	p = .015	

Time of Decision to Become Teacher Classification

Group	N	Means	S.D.	F-Ratio	Scheffes**
1. In Elem Grades	40	179.70	29.85		$\bar{X}_3 > \bar{X}_2$
2. In High School	96	168.02	33.10	6.30	
3. After Hi School	46	187.26	26.17	p = .002	

*Levels of scale scores: 17 - 44, 45 - 52, 53 - 70, respectively.

**$p < .05$

Table 2

Significant Attitude, Concerns, and Anxiety ANOVA Comparisons (Hypothesis 2a)

Assurance of Decision to Teach

		Attitudes		Anxiety	
	N	Means	S.D.	Means	S.D.
1. Very Certain	117	53.38	5.43	65.18	11.08
2. Almost Certain	106	50.17	6.16	73.50	10.37
3. 50/50	36	44.69	6.73	74.83	7.75
4. Doubtful	6	43.17	9.91	78.50	8.04
F-Ratio		22.99		16.46	
p		.0001		.0001	
Scheffes*		$\bar{X}_1 > \bar{X}_4$; $\bar{X}_1 > \bar{X}_3$; $\bar{X}_1 > \bar{X}_2$; $\bar{X}_2 > \bar{X}_4$; $\bar{X}_2 > \bar{X}_3$		$\bar{X}_4 > \bar{X}_1$ $\bar{X}_3 > \bar{X}_1$ $\bar{X}_2 > \bar{X}_1$	

Prediction of Future Effectiveness

	N	Attitudes		Task Subscale		Anxiety	
I will be:		Means	S.D.	Means	S.D.	Means	S.D.
1. Truly Exceptional	23	52.04	5.24	20.17	5.23	60.57	11.01
2. Outstanding	80	52.28	5.93	19.46	4.16	66.25	10.53
3. Unusually Good	92	50.12	6.46	18.32	4.24	72.13	9.83
4. Good	56	48.98	7.64	17.68	3.78	76.18	8.86
F-Ratio		3.45		3.16		19.21	
p		.017		.03		.0001	
Scheffes*		$\bar{X}_2 > \bar{X}_4$				$\bar{X}_4 > \bar{X}_1$; $\bar{X}_4 > \bar{X}_2$; $\bar{X}_3 > \bar{X}_1$; $\bar{X}_3 > \bar{X}_2$;	

*p < .05

Table 3

The Significant Anxiety, Attitude, and Concerns

ANOVA Comparisons (Hypotheses 2b and 2c)

Father's Educational Levels

	Anxiety				
	N	Means	S.D.	F	p
1.Less than High School	15	72.20	11.55	3.17	.01
2.High School	89	72.76	10.36		
3.Some College	56	69.32	11.26	Scheffes*:	
4.A 4-year Degree	63	69.01	11.46	$\bar{X}_2 > \bar{X}_5$	
5.More than 1 Degree	35	65.40	12.20		

Gender of Students

	Task Concerns				Attitude			
	N	Means	S.D.	t	N	Means	S.D.	t
1.Male	54	13.33	3.14	3.13	54	47.56	7.02	3.73
2.Female	212	11.77	3.70	p<.01	211	51.49	6.44	p<.01

College Class Standing

	Attitude				
	N	Means	S.D.	F	p
1.Freshmen	95	51.22	6.03		
2.Sophomore	119	51.05	6.95	2.93	.03
3.Juniors	36	49.03	7.32	Scheffes*:	
4.Seniors	12	45.67	7.06	$\bar{X}_1 > \bar{X}_4$; $\bar{X}_2 > \bar{X}_4$	

(Table continues)

Proposed Teaching Field

Attitude

	N	Means	S.D.	F	p
1.Elementary	96	52.63	5.67	4.51	.004
2.Secondary	71	49.80	7.46	Scheffes*:	
3.Special Education	50	49.96	6.69	$\bar{X}_1 > \bar{X}_4$	
4.Specialized Areas	40	48.73	7.15	$\bar{X}_1 > \bar{X}_2$	

*p < .05